<u>Listing of Claims</u>

Please amend claims 1, 4, 10, 11, 13, 15, 18 and 20 as shown below. This listing of claims will replace all prior versions of claims and listings of claims in the application:

What is claimed is:

1. (currently amended) A clone-brushing method of painting in a 2D image, the method comprising: a) specifying a first world plane in the 2D image; b) providing a source position and a destination position in the 2D image; c) identifying a destination region in the 2D image relative to the destination position; d) determining a source region in the 2D image ~~relative to the first world plane and~~ corresponding to the destination region <u>in the 2D image including:</u> ~~wherein the source region in the 2D image is determined by~~ <u>defining</u> a transformation that maps the destination position <u>relative to the first world plane</u> to the source position <u>relative to the first world plane using</u> ~~and~~ a homography defined by the first world plane<u>, and identifying pixels in the source region of the 2D image corresponding to pixels in the destination region of the 2D image using the transformation and the homography</u> ~~;~~ e) transforming 2D image information of the source region relative to the first world plane to 2D image information of the destination region; and f) painting in the 2D image by copying the transformed 2D image information to the destination region.

2. cancelled.

3. (previously presented) The method of Claim 1, wherein specifying a first world plane in the 2D image comprises specifying two sets of parallel lines.

4. (currently amended) The method of Claim 1, wherein transforming 2D image information) further comprises a bilinear interpolation of 2D image information in the source region relative to the first world plane.

5. (previously presented) The method of Claim 1 further comprising: providing a first color sample region for the source region; providing a second sample color region for the destination region; and computing a color ratio between the first color sample region and the second color sample region, wherein transforming 2D image information further comprises applying the color ratio to the 2D image information of the source region.

6. (original) The method of Claim 5, wherein the color ratio is computed using Gaussian weighted averages of the first and second sample color regions.

7. (original) The method of Claim 5, wherein the first color sample region is provided with respect to the first world plane.

8. (previously presented) The method of Claim 1, further comprising specifying a second world plane and a relative scale factor in the 2D image, wherein: determining a source region in the 2D image comprises determining a source region in the 2D image relative to the first world plane and corresponding to the destination region relative to the second world plane and the relative scale factor; and transforming 2D image information comprises transforming the 2D image information of the source region relative to the first world plane to 2D image information of the destination region relative to the second world plane and the relative scale factor.

9. (original) The method of Claim 8, wherein specifying the second world plane comprises specifying two sets of parallel lines.

10. (currently amended) The method of Claim 8, wherein specifying the relative scale factor comprises specifying a line segment of unit length relative to the first world plane and specifying a line segment of unit length relative to the second world plane.

11. (currently amended) A clone-brushing method of painting in an 2D image, the method comprising: a) providing a first color sample region; b) providing a second color sample region; c) computing a color ratio between the first color sample region and the second color sample region; d) providing a source position in the 2D image; e) providing a destination position in the 2D

image; ~~f)~~ identifying a destination region in the 2D image relative to the destination position; ~~g)~~ determining a source region in the 2D image corresponding to the destination region; providing a first color sample region in the source region; providing a second color sample region in the destination region; computing a color ratio between the first color sample region and the second color sample region; ~~wherein the source region in the 2D image is determined by a transformation that maps the destination position to the source position and a homography defined by the first world plane~~ applying the color ratio to 2D image information of the source region and transforming the 2D image information of the source region to 2D image information of the destination region; and painting by copying the transformed 2D image information to the destination region.

12. (original) The method of Claim 11, wherein the color ratio is computed using Gaussian weighted averages of the first and second sample color regions.

13. (currently amended) A clone-brushing method of painting in an 2D image according to claim 1, ~~the method comprising: ,~~ ~~a) providing a source position in the 2D image; b) providing an initial destination position in the 2D image; c) determining a snapped destination position; d) identifying a destination region in the 2D image relative to the snapped destination position; e) determining a source region in the 2D image corresponding to the~~

~~destination region wherein the source region in the 2D image is determined by a transformation that maps the destination position to the source position and a homography defined by the first world plane; f) transforming 2D image information of the source region to 2D image information of the destination region; and g) painting by copying the transformed 2D image information to the destination region.~~ <u>wherein the destination position is a snapped destination position.</u>

14. (previously presented) The method of Claim 13, wherein determining a snapped destination position comprises searching a collection of candidate destination positions.

15. (currently amended) ~~The method of Claim 14,~~ <u>A clone-brushing method of painting in an 2D image, the method comprising: a) providing a source position in the 2D image; b) providing an initial destination position in the 2D image; c) determining a snapped destination position; d) identifying a destination region in the 2D image relative to the snapped destination position; e) determining a source region in the 2D image corresponding to the destination region; f) transforming 2D image information of the source region to 2D image information of the destination region; and g) painting by copying the transformed 2D image information to the destination region, wherein determining a snapped destination position comprises searching a collection of candidate destination positions and</u> wherein determining a snapped

destination position further comprises applying a quality metric to the source

position, applying the quality metric to the candidate destination positions, and

determining a snapped destination position from the collection of candidate

destination positions whose quality is similar to the quality of the source

position.

16. (original) The method of Claim 15, wherein the quality metric is a

Gaussian-weighted color average for a region surrounding the position.

17. (original) The method of Claim 15, wherein the quality metric

compensates for regional color variation by applying a color ratio.

18. (currently amended) A system for clone-brushing in a 2D image, the

system comprising: a computer comprising a processor, memory, and a

display, the memory containing instructions that, when executed by the

processor, cause the computer to: receive an input 2D image; interact with a

user to specify a first world plane in the 2D image; interact with a user to

provide a source position and a destination position in the 2D image; interact

with a user to identifying a destination region in the 2D image relative to the

destination position; determine a source region in the 2D image relative to the

first world plane and corresponding to the destination region including: define

a transformation that maps the destination position relative to the first world

plane to the source position relative to the first world plane using a

homography defined by the first world plane, and identify pixels in the source region of the 2D image corresponding to pixels in the destination region of the 2D image using the transformation and the homography~~wherein the source region in the 2D image is determined by a transformation that maps the destination position to the source position and a homography defined by the first world plane~~; transform 2D image information of the source region relative to the first world plane to 2D image information of the destination region; and clone-brush by copying the transformed 2D image information to the destination region.

19. (original) The system of Claim 18, wherein the instructions, when executed by the processor, further cause the computer to interact with the user to specify a world plane by drawing two sets of parallel lines.

20. (currently amended) The system of Claim 18, wherein the instructions, when executed by the processor, further cause the computer to interact with the user to: provide a first color sample region for the source region; provide a second sample color region for the destination region; and compute a color ratio between the first color sample region and the second color sample region, wherein ~~step~~ the color ratio is applied to the 2D image information of the source region when the 2D image information of the source region relative to the first world plane is transformed to 2D image information of the destination region.